VIRGINIA BALD EAGLE NEST AND PRODUCTIVITY SURVEY: YEAR 2004 REPORT

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Front Cover: *Catherine Markham climbs an eagle nest tree on the Mattaponi River. Photo by Bryan Watts.*

The Center for Conservation Biology is an organization dedicated to discovering innovative solutions to environmental problems that are both scientifically sound and practical within today's social context. Our philosophy has been to use a general systems approach to locate critical information needs and to plot a deliberate course of action to reach what we believe are essential information endpoints.

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EXECUTIVE SUMMARY

By the late 1960's, the Virginia bald eagle breeding population had been decimated by eggshell thinning and associated low productivity. In 1977, the U. S. Fish and Wildlife Service formed the Chesapeake Bay Bald Eagle Recovery Team. This team was tasked with developing a plan for the recovery of the Bay population. As part of this process, state wildlife agencies assumed the responsibility for population monitoring. The Virginia Department of Game & Inland Fisheries along with the College of William & Mary initiated a systematic survey in the spring of 1977. Since that time, the annual bald eagle survey has become the most essential element of a successful conservation strategy. Our objectives in continuing the Virginia bald eagle nest survey are 1) to monitor the recovery of the bald eagle in Virginia, 2) to document the status, distribution, and productivity of breeding bald eagles in Virginia, 3) to provide information to the government agencies charged with the management and protection of the Virginia Bald Eagle population, 4) to provide information to land holders about the status of Bald Eagles on their properties, and 5) to increase our understanding of Bald Eagle natural history in Virginia.

The Virginia Bald Eagle survey measures breeding activity and productivity via a standard 2-flight approach. The first flight is conducted between late February and mid-March to locate active nests. A high-wing Cessna 172 aircraft is used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle nests. All Bald Eagle nests detected are plotted on 7.5 min topographic maps and given a unique alpha-numeric code. Each nest is examined to determine its condition and activity status. The second survey flight is conducted from late April through mid-May to check active nests for productivity.

During the 2004 breeding season, the annual survey documented 428 occupied Bald Eagle territories in Virginia. This number represents a 1.6% decrease compared to 2003 and is out of line with the 10-12% annual increases recorded in recent years. Damage from hurricane Isabel and a lack of available information on inland territories may help to explain the fractional decline. Of 413 nests documented to be occupied in 2003, 23.5% were damaged or lost in the hurricane. Despite the absence of population growth, the Virginia Bald Eagle population produced the largest number of chicks ever recorded in the state. A total of 612 chicks were produced surpassing the 501 chicks produced in 2002 by more than 20%. Per capita reproductive rate was the second highest in the survey's history. This stems from the fourth highest success rate and brood size over the 28 years of survey. Compared to 2003, this reproductive rate is nearly 30% higher suggesting that for those pairs that were able to recover from the storm, 2004 was a good spring.

BACKGROUND

Context

No specific estimates of the Chesapeake Bay Bald Eagle population are available prior to the early 1900's. However, given the high productivity of Bay waters and the availability of extensive shallow-water foraging areas, it has been speculated that prior to European settlement the Chesapeake Bay may have supported one of the densest breeding populations of Bald Eagles outside of Alaska. By applying breeding densities from Alaska to the 13,000 km of Chesapeake shoreline, Fraser et al. (1991) suggest that the pristine Chesapeake may have supported in excess of 3,000 breeding pairs of Bald Eagles. A more recent investigation (Watts et al. 2003) shows significant spatial variation in colonization rates and breeding density that suggests carrying capacity varies throughout the Bay. One implication of these results is that the initial carrying capacity of the Bay may have been approximately half of that projected by the Fraser et al. (1991) study.

A decline in the Chesapeake Bay Bald Eagle population was evident to the ornithological community by the mid-1950's. The first aerial survey of eagle nests in the Chesapeake Bay was conducted in 1962 (Abbott 1963). The survey included approximately twice the land area covered by Tyrell in 1936. Survey results suggested that about 150 breeding pairs of eagles remained in the Chesapeake Bay in 1962. Annual aerial surveys continued to document a decline until the population reached an estimated low of 80-90 pairs in 1970 (Abbott 1978).

In 1977, the U. S. Fish and Wildlife Service formed the Chesapeake Bay Bald Eagle Recovery Team (Abbott 1977). This team was tasked with developing a plan for the recovery of the Bay population. As part of this process, state wildlife agencies assumed the responsibility for population monitoring. As the state agency responsible for wildlife management, The Virginia Game Commission (currently, The Virginia Department of Game & Inland Fisheries) is responsible for Bald Eagle monitoring and management in Virginia. Under contract to the state M. A. Byrd took over responsibility for the survey in 1977. The 2004 breeding season represents the 28th year of the comprehensive Bald Eagle breeding survey.

Objectives

Our objectives in continuing the Virginia bald eagle nest survey are:

1) to monitor the recovery of the bald eagle in Virginia
2) to document the status, distribution, and productivity of breeding bald eagles in Virginia
3) to provide information to the government agencies charged with the management and protection of the Virginia bald eagle population
4) to provide information to land holders about the status of bald eagles on their properties
5) to increase our understanding of bald eagle natural history in Virginia

METHODS

Study Area

The primary focus area for the Virginia Bald Eagle breeding survey includes the tidal reaches of Chesapeake Bay tributaries and the lower Delmarva Peninsula. All Chesapeake Bay tributaries in Virginia are systematically surveyed to the extent of tidal influence. These drainages encompass nearly all historic records of breeding eagles in Virginia and continue to support the vast majority of the population. Throughout the 1990's, several areas have been added to the core survey area including Back Bay/North Landing River area, Lake Drummond, Kerr Reservoir, Lake Chesdin, Swift Creek Reservoir, Diascund Reservoir, and Lake Manassas. No attempts have been made to systematically survey the piedmont and mountain regions of Virginia. With the dramatic increase in inland reservoirs over the past few decades, it seems likely that breeding pairs remain undiscovered within these physiographic provinces. Nesting pairs known to occur within these regions have generally been discovered by agency biologists and the general public.

Survey

The Virginia Bald Eagle survey measures breeding activity and productivity via a standard 2-flight approach (Fraser et al. 1983). The first flight is conducted between late February and mid-March to locate active nests. A high-wing Cessna 172 aircraft is used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle nests. The aircraft is maneuvered systematically between the shoreline and a distance of approximately 1 km to cover the most probable breeding locations. All Bald Eagle nests detected are plotted on 7.5 min topographic maps and given a unique alpha-numeric code. Each nest is examined to determine its condition and activity status. A breeding territory is considered to be "occupied" if a pair of birds is observed in association with the nest and there is evidence of recent nest maintenance (e.g. well-formed cup, fresh lining, structural maintenance). Nests are considered to be "active" if a bird is observed in an incubating posture or if eggs or young are detected in the nest (Postupalsky 1974). The second survey flight is conducted from late April through mid-May to check active nests for productivity. A high-wing Cessna 172 is flown low over the nest allowing observers to examine nest contents. The number of eaglets present is recorded along with their approximate ages.

Hurricane Isabel Damage

During the survey flight, the condition of 413 nests was assessed relative to wind damage from Hurricane Isabel. This set of nests included only those that were classified as active or within territories that were classified as occupied during the 2003 breeding season. Nest and tree damage was assessed using a graded scale (1-5) with 5 being the most severe damage. Broad categories were defined as follows: 1) no visible damage – nest is in good structural condition with no indication of damage since the last breeding

season, 2) minor damage – nest tilted from its original position or with minor structural damage but >75% remnant, 3) severe damage – a portion of nest still in tree but with substantial structural damage such as dislodged from original position by more than 30% or remaining remnant <75%, 4) nest completely blown out of tree with no visible remnant, and 5) nest tree down.

Survey plane over Hog Island Wildlife Management Area. Photo by Bryan Watts.

Typical nesting situation in cluster of pines on Lake Chesdin. Photo by Bryan Watts.

Typical nesting situation in isolated pine over marsh (Rappahannock River). Photo by Bryan Watts.

Single 5-wk old chick in nest. Photo by Catherine Markham.

RESULTS

Breeding Population

A total of 428 Bald Eagle territories was determined to be occupied in Virginia during the 2004 breeding season (Table 1, see Appendices I – VIII for nesting details by geographic area). When compared to 2003, this represents a 1.6% decrease in the breeding population (Table 2). This is the lowest rate of change recorded during the 28-year history of the survey (Figure 1). More than 120 new nests were mapped in 2004. Many of these new nests represent relocations within existing territories, although a substantial number of new territories were discovered. The number of active nests increased by 8.1% compared to 12.8% for the previous year. Growth in the Virginia breeding population was relatively flat compared to recent years (Figure 1), possibly reflecting 1) damage to territories caused by hurricane Isabel and lack of survey information from inland locations.

Table 1. Summary of 2004 Bald Eagle survey results by geographic area. See methods for definitions of "occupied territory" and "active nest". Chicks/active nests and chicks/productive nests are mean values.

GEOGRAPHIC AREA	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ ACT NEST[1]	CHICKS/ PROD NEST[1]
POTOMAC RIVER	96	91	112	1.32	1.81
RAPPAHAN. RIVER	109	100	150	1.60	1.90
YORK RIVER	42	41	70	1.71	1.89
JAMES RIVER	98	91	155	1.70	2.01
WESTERN SHORE	21	19	34	1.79	2.00
EASTERN SHORE	32	31	45	1.45	1.73
LOWER TIDEWATER	12	11	20	1.82	2.00
INLAND AREAS	18	17	26	1.63	1.86
TOTAL	**428**	**401**	**612**	**1.58**	**1.90**

[1]Calculated based on nests with known outcome. Success of 13 nests known to be active was not determined.

Unlike between 2002 and 2003, growth in the breeding population between 2003 and 2004 was mixed across geographic areas (Tables 1 and 2). Modest gains in breeding territories were recorded within the Potomac River, James River, Western Shore, Eastern Shore, and lower tidewater. Small declines in territories were recorded for all other geographic areas. However, documented breeding attempts increased in nearly all geographic areas between the 2 years. The majority of known territories continue to be concentrated within the coastal plain with less than 5% of pairs occurring in the piedmont and mountains (it should be noted that the systematic survey is focused primarily on the coastal tributaries). Occupied territories were located within 45 counties and 9 independent cities (Table 3). Pairs were documented for the first time in Clarke County and Petersburg. Westmoreland, King George, Richmond, Essex, and Charles City counties

continue to support the highest number of pairs in the state. These 5 counties alone account for 36.4% of the state population. Population growth over the past few years in Accomack County has been dramatic. This county now supports more than 5% of the population.

Table 2. Summary of 2003 Bald Eagle survey results by geographic area. See methods for definitions of "occupied territory" and "active nest". Chicks/active nests and chicks/productive nests are mean values.

GEOGRAPHIC AREA	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ ACT NEST[1]	CHICKS/ PROD NEST[1]
POTOMAC RIVER	94	82	102	1.26	1.65
RAPPAHAN. RIVER	116	94	98	1.05	1.58
YORK RIVER	50	47	60	1.28	1.76
JAMES RIVER	92	80	104	1.30	1.65
WESTERN SHORE	19	17	24	1.41	1.71
EASTERN SHORE	30	26	28	1.08	1.33
LOWER TIDEWATER	11	11	18	1.64	2.00
INLAND AREAS	23	14	20	1.43	2.22
TOTAL	**435**	**371**	**454**	**1.23**	**1.66**

[1]Calculated based on nests with known outcome. Success of 2 nests known to be active was not determined.

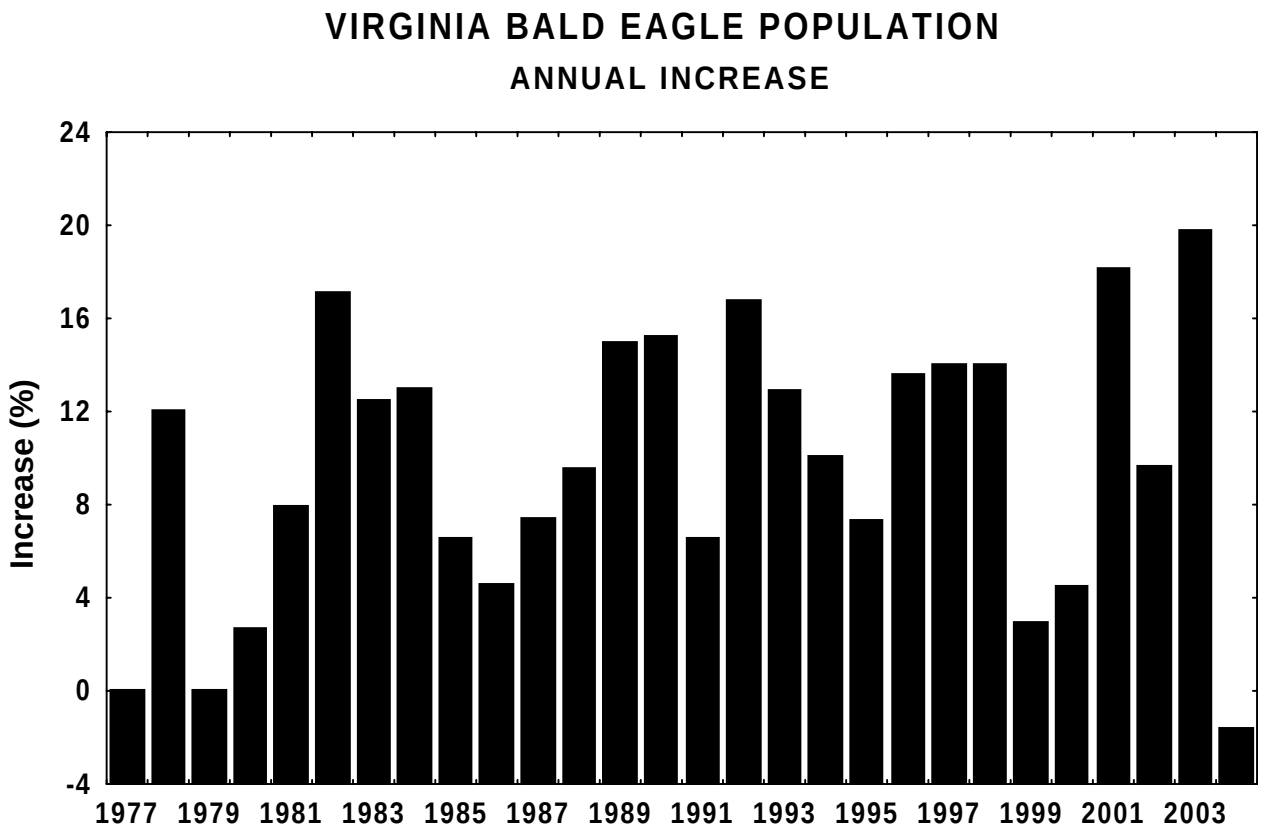

Figure 1. Annual increase values for the 28-year survey period (1977-2004). Values calculated as $(Pairs_t - Pairs_{t-1})/Pairs_{t-1} X 100$.

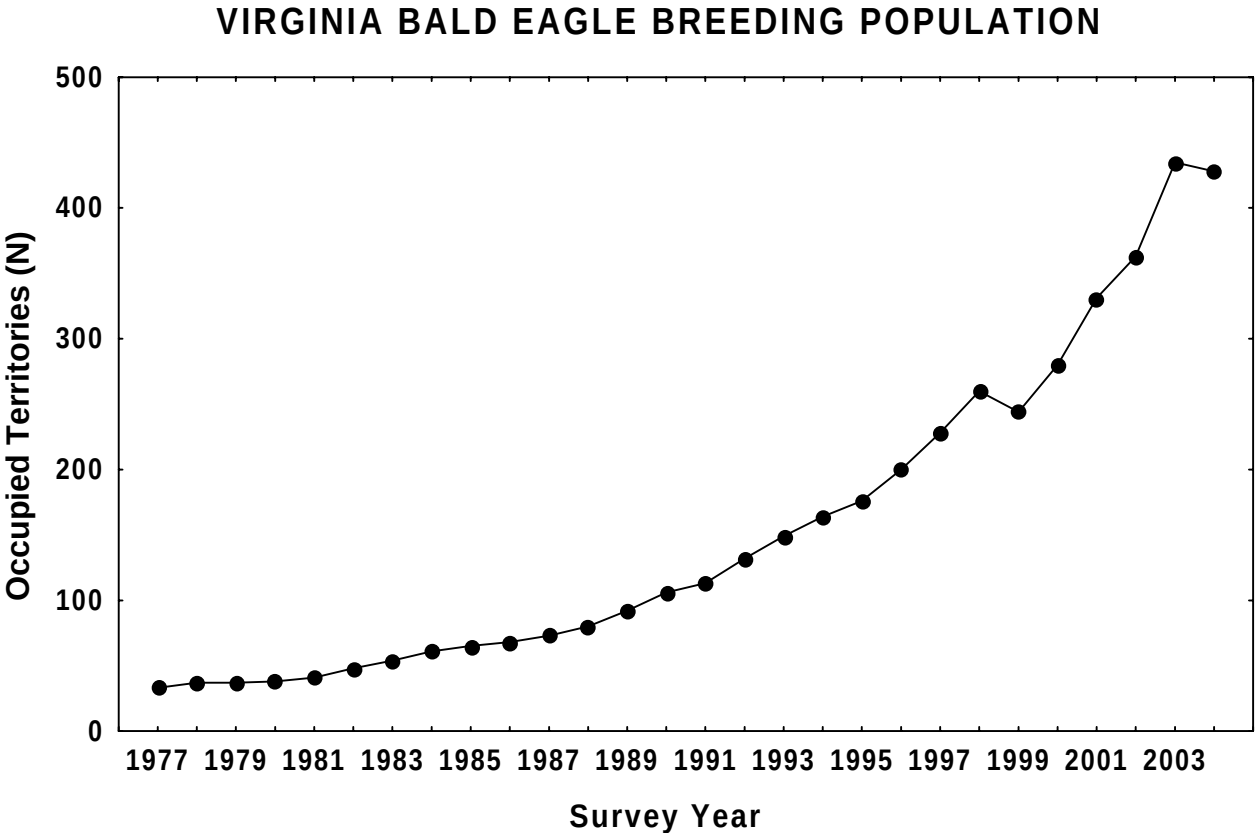

Figure 2. Number of known Bald Eagle territories in Virginia (1977-2004).

Table 3. Summary of 2004 Bald Eagle survey results by jurisdiction. See methods for definitions of "occupied territory" and "active nest". Chicks/active nests and chicks/productive nests are mean values.

COUNTY	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ ACT NESTS	CHICKS/ PROD NESTS
Counties					
Accomack	22	22	33	1.50	1.74
Albemarle	?	?	-----	-----	-----
Amherst	2	1	?[1]	-----	-----
Bath	?	?	-----	-----	-----
Bedford	1	0	-----	-----	-----
Caroline	14	11	14[1]	1.40	1.75
Charles City	24	21	38	1.81	2.00
Chesterfield	8	7	13	1.86	2.17
Clarke	2	2	4	2.00	2.00
Culpepper	?	?	-----	-----	-----
Essex	27	26	37	1.42	1.85
Fairfax	11	10	11[2]	1.83	2.20
Faquier	?	?	-----	-----	-----
Gloucester	5	4	6	1.50	2.00
Halifax	1	1	1	1.00	1.00
Hanover	1	1	2	2.00	2.00
Henrico	5	4	8	1.60	2.67

Table 3. –continued-

COUNTY	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ ACT NESTS	CHICKS/ PROD NESTS
Counties					
Isle of Wight	6	6	13	2.17	2.17
James City	15	15	25	1.67	2.08
King George	33	33	44	1.33	1.83
King & Queen	6	5	7	1.40	1.40
King William	14	14	26	1.86	2.17
Lancaster	11	10	18	1.80	1.80
Louisa	?	?	-----	-----	-----
Mathews	4	4	7	1.75	1.75
Mecklenburg	6	6	11	1.83	1.83
Middlesex	13	12	27	2.25	2.25
New Kent	11	11	18	1.64	1.80
Northampton	10	9	10	1.11	1.43
Northumberland	17	16	21	1.31	1.91
Nottoway	?	?	-----	-----	-----
Page	?	?	-----	-----	-----
Pittsylvania	?	?	-----	-----	-----
Powhatan	1	1	1	1.00	1.00
Prince Edward	1	1	3	3.00	3.00
Prince George	12	11	18	1.64	2.00
Prince William	7	7	10	1.43	1.67
Richmond	29	27	37	1.37	2.06
Shenandoah	?	?	-----	-----	-----
Southampton	1	1	2	2.00	2.00
Stafford	11	9	15[1]	1.88	1.88
Surry	18	16	23	1.44	1.64
Sussex	3	3	2	0.67	2.00
Westmoreland	43	40	52[1]	1.33	1.41
York	7	7	11	1.57	1.83
Independent Cities					
Chesapeake City	3	3	7	2.33	2.33
Hampton City	2	2	2	1.00	2.00
Hopewell City	1	1	0	0.00	-----
Newport News City	3	3	4	1.33	2.00
Norfolk City	1	1	2	2.00	2.00
Petersburg City	1	1	3	3.00	3.00
Richmond City	1	1	2	2.00	2.00
Suffolk City	6	6	11	1.83	1.83
Virginia Beach City	7	6	10	1.67	2.00

[1]Results of 1 active nest unknown.
[2]Results of 4 active nests unknown.

Productivity

A total of 612 chicks were counted during the productivity flight (Table 1, see Appendices I – VIII for nesting details by geographic area). This is the highest chick production recorded during the 29-year survey. The Virginia population continues to have tremendous reproductive momentum. Of 5,406 chicks documented in the past 28 years, more than 11% were produced in 2004 and 29% were produced in the past 3 years (Figure 3). In general, this momentum is the combined result of an overall increase in the breeding population, the breeding success rate and the average brood size. Average reproductive rate (1.53 chicks/breeding attempt) was the second highest in the history of the survey. Success rate and average brood size were both high in 2004. The percentage of active nests that were documented to be successful was 83% (Figure 4). This is the fourth highest success rate over the 28 years. Average brood size (chicks/productive nests) was 1.87 chicks/nest (Figure 5). This rate is also the fourth highest over the history of the survey. These values continue the upward trend in reproductive performance observed over the past 15 years.

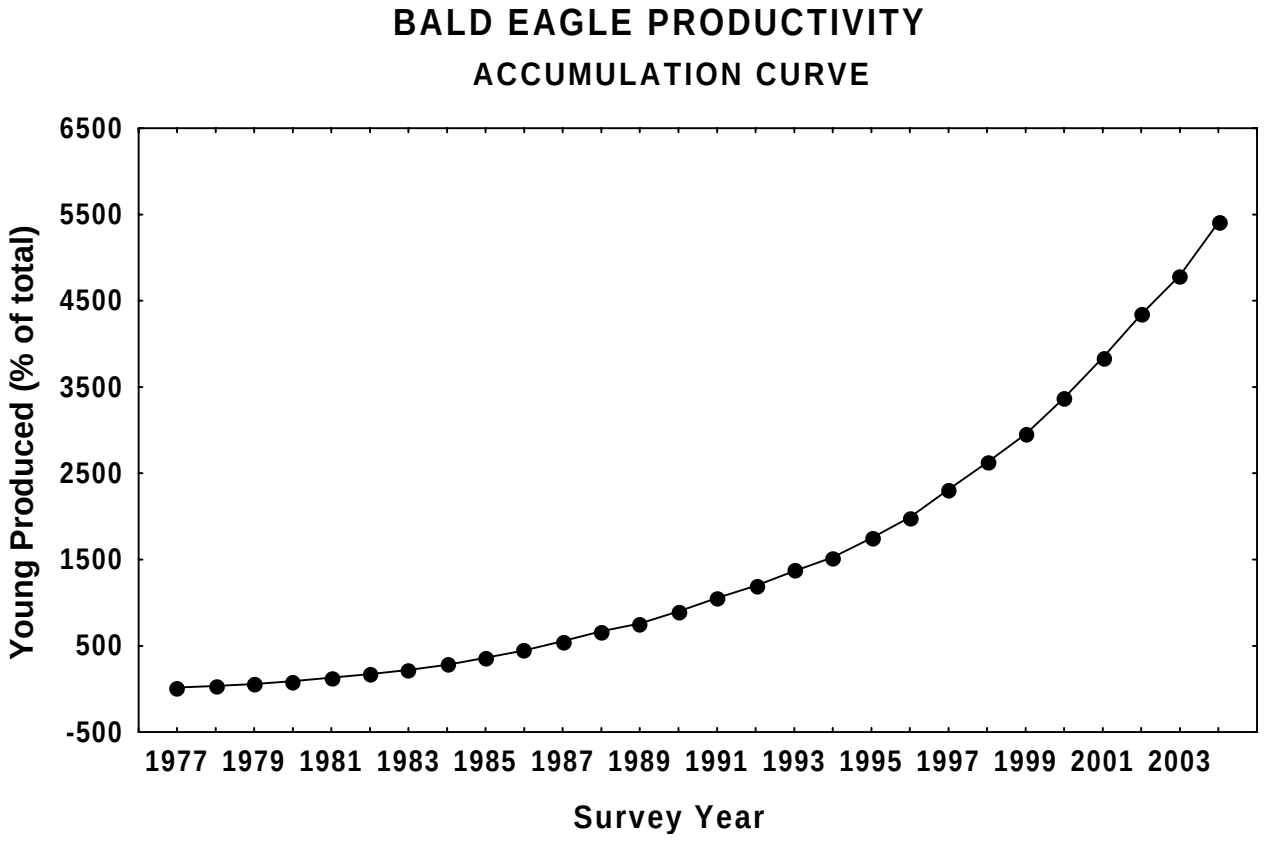

Figure 3. Productivity accumulation curve for Bald Eagles in Virginia (1977-2004). Total chicks produced over the 28-year study was 5,406.

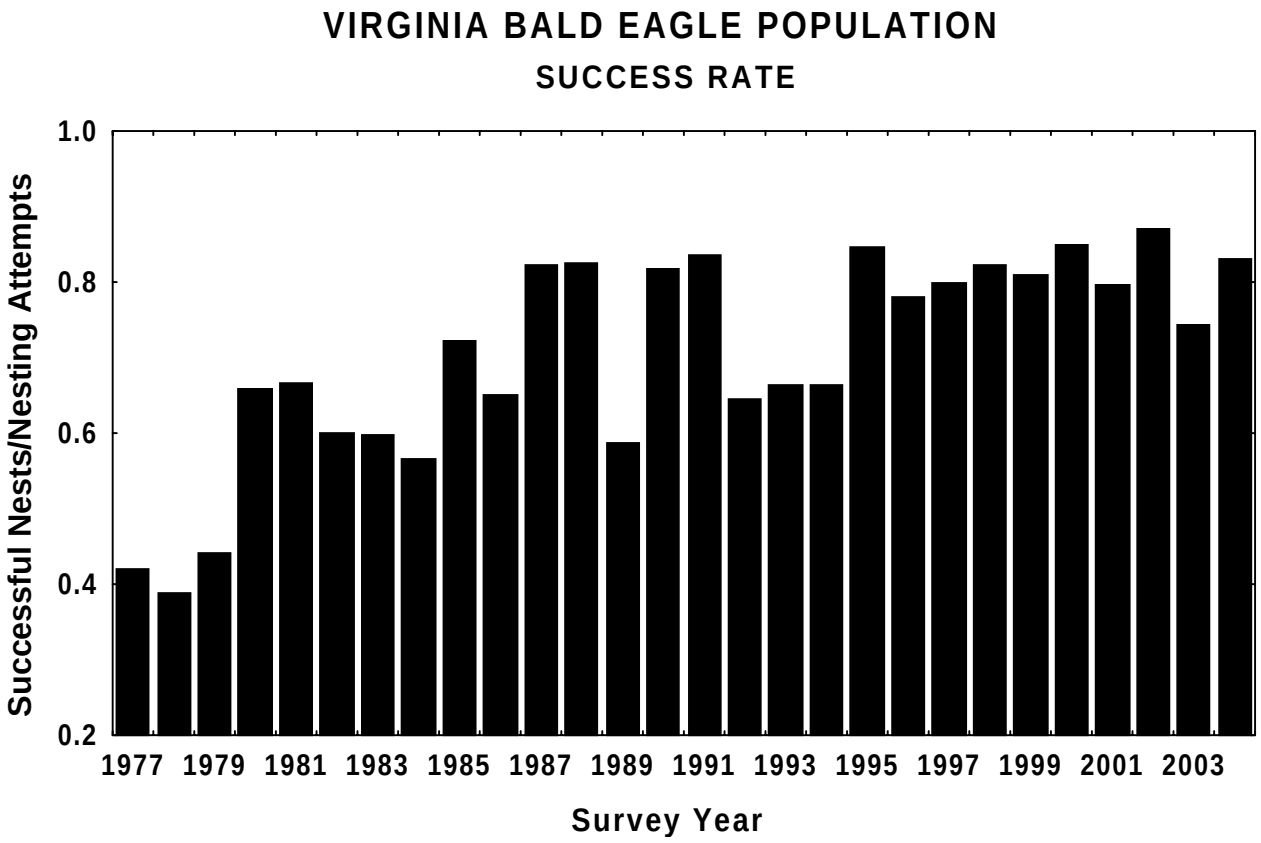

Figure 4. General trend in success rate for Bald Eagles in Virginia (1977-2004). Success rate calculated as successful nests/active nests.

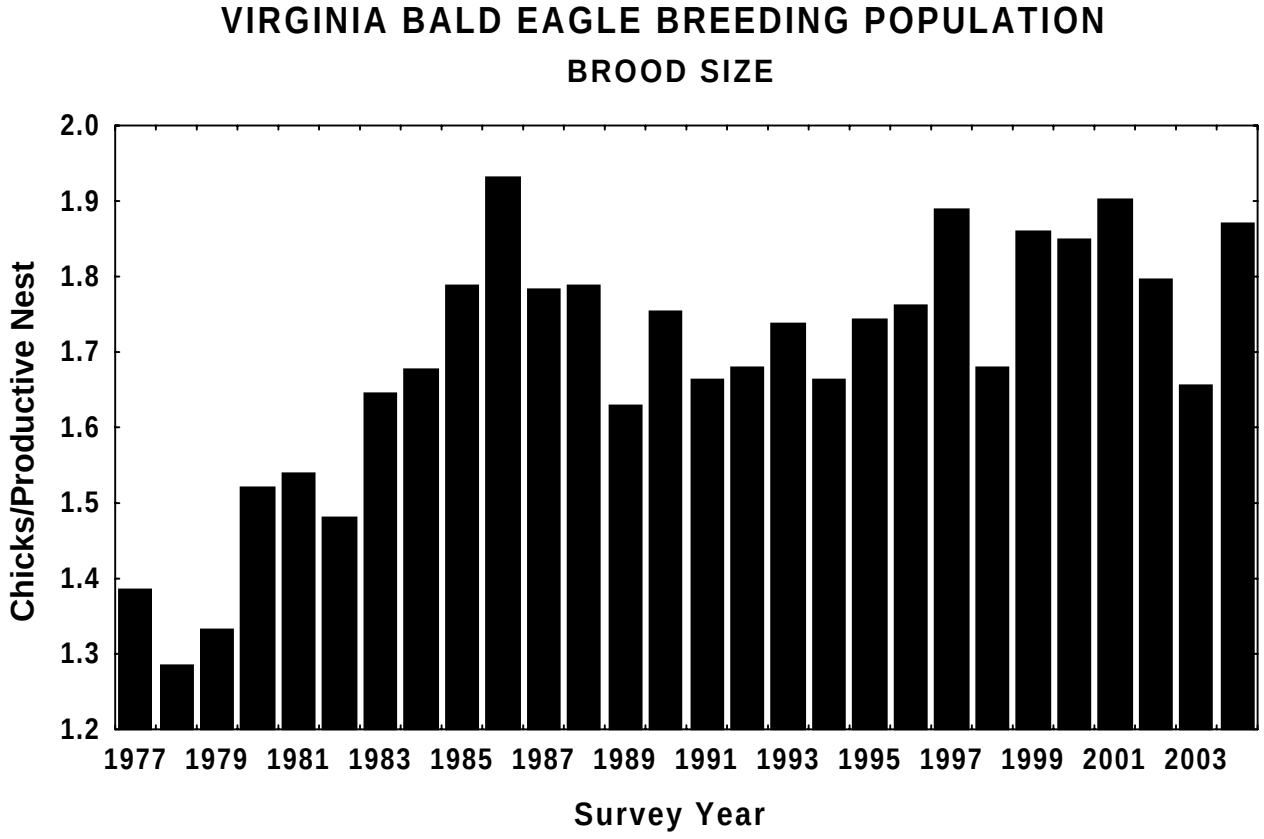

Figure 5. Temporal trend in average brood size for Bald Eagles in Virginia (1977-2004).

Impact of Hurricane Isabel

A considerable portion (23.5%) of nests that were active in 2003 sustained damage during the non-breeding season. This included 25 (6.1%) nests with visible damage, 64 (15.5%) nests that were completely blown out, and 8 (1.9%) nest trees that were destroyed. The relationship between the extent of nest damage and productivity is currently being evaluated.

Storm damage was widespread throughout the study area (Figure 6). The position of nest trees relative to the direction of heavy winds seemed to have an influence on damage. Nests that were along east-facing edges or on exposed bluffs seemed to experience more damage than those down in protected streams or along west-facing edges. Quantification of these topographic influences is continuing.

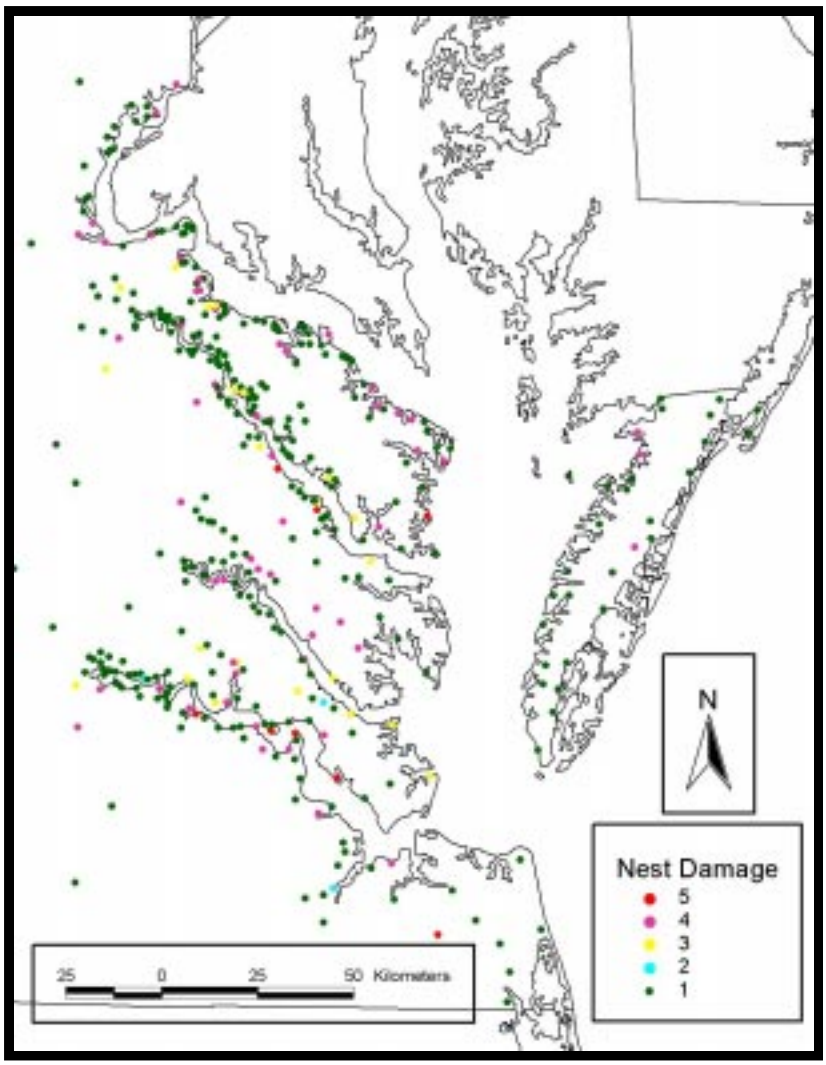

Figure 6. Distribution of damage to Bald Eagle nests due to hurricane Isabel. See methods for key and definition of number categories.

DISCUSSION

Growth in the Virginia Bald Eagle breeding population was flat between 2003 and 2004. Known breeding pairs declined by a small fraction during this time period. This decline appears to be, at least in part, due to a lack of information about inland nesting pairs. Information was not available on 9 inland pairs. This lack of information equates to the approximate level of the decline. However, this information gap is not enough to explain the lack of population growth. In recent years, population growth has been continuing on a pace of 10-12%/year. Between 2003 and 2004 there was actually a fractional decline. This decline is more than would be expected based on the lack of information alone.

A second factor that seems to have influenced the number of occupied territories in 2004 was hurricane Isabel. Although most of the pairs that experienced nest damage or loss due to the storm rebuilt and made breeding attempts, there were some scattered territories that had clearly not recovered. Within some exposed areas, entire forest blocks were lost to the storm. For some pairs, most of the trees adequate to support nest structures were lost within their territories. It appeared in some cases that pairs were simply sitting the season out. Only time will tell if these territories will be rehabilitated and reactivated.

Despite the absence of population growth, the Virginia Bald Eagle population produced the largest number of chicks ever recorded in the state. A total of 6121 chicks were produced surpassing the 501 chicks produced in 2002 by more than 20%. Per capita reproductive rate was the second highest in the survey's history. This stems from the fourth highest success rate and brood size over the 28 years of survey. Compared to 2003, this reproductive rate is nearly 30% higher suggesting that for those pairs that were able to recover from the storm, 2004 was a good spring.

As has been the case in previous years, the annual breeding survey has played an important role in the recovery of the Virginia Bald Eagle population. In addition to tracking the progress of the population, the survey has been used to guide management actions. Without information on the distribution and activity status of breeding pairs, layers of protection provided by federal laws would not be effective. The program has proven to be one of the most important elements of a successful conservation strategy (Byrd et al. 1990).

ACKNOWLEDGEMENTS

Many individuals and organizations contributed to the success of the 2004 Bald Eagle survey in Virginia. Ray Fernald and Jeff Cooper from the Virginia Department of Game & Inland Fisheries provided logistical support. Captain Fuzzzo and Matt Crabbe provided expert flying services. Elizabeth Long and John DiGiorgio assisted on two productivity flights. Numerous individuals including Ruth Boettcher, Dana Bradshaw, Keith Cline, Linda Cole, Jeff Cooper, Thelma Dalmas, Eric Davis, Jolie Harrison, Mark Indseth, Reese Lukei, Jeff Marcell, Sharon Oehler, Chuck Rafkind, Sandy Spencer, Tim Stamps, and Thomas Wray provided information toward the survey. Bart Paxton and Catherine Markham provided data management support. Marian Watts provided production assistance. Carlton Adams, Renee Peace, Lydia Whitaker, Mark Roberts, Cheryl Pope, Bonnie Willard, Anne Womack, and Gloria Sciole from the College of William and Mary provided logistical support. Financial support was provided by the Virginia Department of Game & Inland Fisheries, the U.S. Fish and Wildlife Service, the U.S. Department of Defense, the U.S. Army Corps of Engineers, and the Center for Conservation Biology.

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Appendix I: Summary of 2004 Bald Eagle survey results for the Potomac River Drainage. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
FF-92-01	Fairfax	Mount Vernon	NC	NC	NC
FF-94-01	Fairfax	Fort Belvoir	Y	Y	2
FF-96-01	Fairfax	Fort Belvoir	Y	Y	3
FF-96-02	Fairfax	Fort Belvoir	Y	Y	?[1]
FF-97-01	Fairfax	Fort Belvoir	Y	Y	2
FF-00-02	Fairfax	Fort Belvoir	Y	Y	0
FF-01-01	Fairfax	Occoquan	Y	Y	?[1]
FF-01-02	Fairfax	Indian Head	Y	Y	3
FF-04-01	Fairfax	Fort Belvoir	Y	N	-----
FF-04-02	Fairfax	Fort Belvoir	Y	Y	?[1]
FF-04-03	Fairfax	Indian Head	Y	Y	1
FF-04-04	Fairfax	Fort Belvoir	Y	Y	?[1]
FQ-92-01	Faquier	Rectortown	NC	NC	NC
KG-82-02	King George	Rollins Fork	Y	Y	2
KG-87-03	King George	King George	Y	Y	3
KG-87-04	King George	Dahlgren	Y	Y	2
KG-87-05	King George	Mathias Point	Y	Y	1
KG-90-02	King George	King George	Y	Y	0
KG-96-05	King George	Dahlgren	Y	Y	0
KG-97-01	King George	Passapatanzy	Y	Y	1
KG-97-05	King George	Dahlgren	Y	Y	2
KG-98-08	King George	Mathias Point	Y	Y	1
KG-99-05	King George	Dahlgren	Y	Y	2
KG-99-08	King George	Dahlgren	Y	Y	2
KG-00-02	King George	Dahlgren	Y	Y	0
KG-01-03	King George	King George	Y	Y	1
KG-01-04	King George	Dahlgren	Y	Y	3
KG-02-05	King George	Mathias Point	Y	Y	2
KG-04-02	King George	Passapatanzy	Y	Y	0
KG-04-03	King George	King George	Y	Y	1
KG-04-04	King George	King George	Y	Y	0
KG-04-05	King George	Dahlgren	Y	Y	3
KG-04-06	King George	Dahlgren	Y	Y	0
KG-04-07	King George	Dahlgren	Y	Y	2
KG-04-08	King George	Dahlgren	Y	Y	0
ND-96-01	Northumberland	St. George Island	Y	Y	2
ND-02-02	Northumberland	Lottsburg	Y	Y	2
ND-02-03	Northumberland	Heathsville	Y	Y	0

Appendix I: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
ND-02-06	Northumberland	Heathsville	Y	Y	2
ND-03-02	Northumberland	Burgess	Y	Y	0
ND-03-03	Northumberland	Reedville	Y	Y	0
ND-03-06	Northumberland	Burgess	Y	Y	0
ND-04-03	Northumberland	Burgess	Y	Y	1
ND-04-04	Northumberland	Burgess	Y	Y	0
ND-04-05	Northumberland	Heathsville	Y	Y	1
ND-04-06	Northumberland	St. George Island	Y	Y	1
PW-98-01	Prince William	Quantico	Y	Y	2
PW-99-01	Prince William	Quantico	Y	Y	2
PW-99-02	Prince William	Quantico	Y	Y	1
PW-02-01	Prince William	Quantico	Y	Y	2
PW-03-01	Prince William	Quantico	Y	Y	2
PW-03-02	Prince William	Quantico	Y	Y	1
PW-04-01	Prince William	Quantico	Y	Y	0
ST-96-03	Stafford	Passapatanzy	Y	Y	2
ST-98-03	Stafford	Quantico	Y	Y	3
ST-99-01	Stafford	Widewater	Y	Y	1
ST-00-01	Stafford	Widewater	Y	Y	2
ST-00-02	Stafford	Joplin	Y	Y	1
ST-01-02	Stafford	Widewater	Y	Y	2
ST-01-03	Stafford	Widewater	Y	Y	2
ST-04-01	Stafford	Stafford	Y	Y	?[1]
ST-04-02	Stafford	Widewater	Y	N	-----
ST-04-03	Stafford	Passapatanzy	Y	N	-----
WE-90-03	Westmoreland	Colonial Beach S.	Y	Y	0
WE-91-02	Westmoreland	Stratford Hall	Y	Y	2
WE-94-02	Westmoreland	Colonial Beach S.	Y	Y	1
WE-96-03	Westmoreland	St. Clements Island	Y	Y	2
WE-96-05	Westmoreland	Stratford Hall	Y	Y	2
WE-97-04	Westmoreland	Colonial Beach S.	Y	Y	?[1]
WE-97-11	Westmoreland	St. Clements Island	Y	Y	2
WE-98-03	Westmoreland	Colonial Beach S.	Y	Y	2
WE-98-05	Westmoreland	Machodac	Y	Y	0
WE-98-07	Westmoreland	Kinsale	Y	Y	2
WE-00-07	Westmoreland	Kinsale	Y	N	-----
WE-00-08	Westmoreland	Kinsale	Y	Y	2
WE-01-04	Westmoreland	Colonial Beach S.	Y	Y	1
WE-01-08	Westmoreland	Machodac	Y	Y	2
WE-01-10	Westmoreland	Piney Point	Y	Y	1

Appendix I: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
WE-01-12	Westmoreland	Machodac	Y	Y	1
WE-02-03	Westmoreland	Stratford Hall	Y	Y	2
WE-02-05	Westmoreland	St. Clements Island	Y	Y	1
WE-02-07	Westmoreland	Kinsale	Y	Y	3
WE-03-03	Westmoreland	Colonial Beach N.	Y	Y	0
WE-03-05	Westmoreland	Colonial Beach S.	Y	Y	0
WE-03-10	Westmoreland	Stratford Hall	Y	Y	3
WE-03-11	Westmoreland	Machodac	Y	Y	0
WE-03-12	Westmoreland	St. Clements Island	Y	Y	0
WE-03-15	Westmoreland	St. Clements Island	Y	Y	2
WE-04-03	Westmoreland	Kinsale	Y	Y	1
WE-04-04	Westmoreland	Kinsale	Y	Y	0
WE-04-05	Westmoreland	Kinsale	Y	Y	2
WE-04-07	Westmoreland	Piney Point	Y	Y	2
WE-04-08	Westmoreland	Montross	Y	Y	2
WE-04-09	Westmoreland	Stratford Hall	Y	N	-----
WE-04-10	Westmoreland	Stratford Hall	Y	Y	0
WE-04-11	Westmoreland	Colonial Beach S.	Y	Y	2
WE-04-12	Westmoreland	Colonial Beach S.	Y	Y	1
WE-04-13	Westmoreland	Colonial Beach S.	Y	Y	0

[1]Nesting results unknown due to dense foliage during productivity flight.

Appendix II: Summary of 2004 Bald Eagle survey results for the Rappahannock River Drainage. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo	Occupied Territory	Active Nest	Chicks Produced
CA-90-02	Caroline	Port Royal	Y	Y	0
CA-90-03	Caroline	Rapp Academy	Y	Y	2
CA-95-02	Caroline	Rapp Academy	Y	Y	2
CA-96-02	Caroline	Port Royal	Y	N	-----
CA-96-05	Caroline	Port Royal	Y	Y	0
CA-00-02	Caroline	Rapp Academy	Y	Y	2
CA-02-01	Caroline	Port Royal	Y	Y	2
CA-03-01	Caroline	Port Royal	Y	Y	2
CA-03-02	Caroline	Supply	Y	N	-----
CA-04-01	Caroline	Supply	Y	Y	1
CA-04-02	Caroline	Supply	Y	N	-----
CA-04-03	Caroline	Bowling Green	Y	Y	2
CA-04-04	Caroline	Port Royal	Y	Y	?[1]
ES-79-01	Essex	Morattico	Y	Y	0
ES-95-05	Essex	Tappahannock	Y	Y	2
ES-97-06	Essex	Loretto	Y	Y	2
ES-98-02	Essex	Mount Landing	Y	Y	2
ES-00-04	Essex	Champlain	Y	Y	1
ES-01-03	Essex	Mount Landing	Y	Y	2
ES-01-05	Essex	Champlain	Y	Y	2
ES-01-06	Essex	Champlain	Y	Y	1
ES-01-07	Essex	Champlain	Y	Y	2
ES-02-02	Essex	Mount Landing	Y	Y	0
ES-02-05	Essex	Loretto	Y	Y	0
ES-02-06	Essex	Rollins Fork	Y	Y	3
ES-03-02	Essex	Tappahannock	Y	Y	2
ES-03-03	Essex	Dunnsville	Y	Y	0
ES-03-06	Essex	Rollins Fork	Y	Y	2
ES-04-01	Essex	Dunnsville	Y	Y	2
ES-04-02	Essex	Dunnsville	Y	N	-----
ES-04-03	Essex	Tappahannock	Y	Y	2
ES-04-04	Essex	Mount Landing	Y	Y	0
ES-04-05	Essex	Mount Landing	Y	Y	2
ES-04-06	Essex	Champlain	Y	Y	2
ES-04-07	Essex	Champlain	Y	Y	1
ES-04-08	Essex	Champlain	Y	Y	0
ES-04-09	Essex	Champlain	Y	Y	2
ES-04-10	Essex	Loretto	Y	Y	1

Appendix II: -continued-

Nest Code	County	Topo	Occupied Territory	Active Nest	Chicks Produced
ES-04-11	Essex	Loretto	Y	Y	2
ES-04-12	Essex	Loretto	Y	Y	2
KG-95-03	King George	Rollins Fork	Y	Y	2
KG-97-08	King George	Rollins Fork	Y	Y	0
KG-98-01	King George	Port Royal	Y	Y	2
KG-99-01	King George	Port Royal	Y	Y	2
KG-02-01	King George	Port Royal	Y	Y	2
KG-02-03	King George	Rollins Fork	Y	Y	0
KG-03-01	King George	Passapatanzy	Y	Y	1
KG-03-02	King George	Rollins Fork	Y	Y	2
KG-03-03	King George	Rollins Fork	Y	Y	2
KG-03-04	King George	Rollins Fork	Y	Y	2
KG-04-01	King George	Port Royal	Y	Y	1
LA-01-02	Lancaster	Irvington	Y	Y	2
LA-02-03	Lancaster	Urbanna	Y	Y	1
LA-03-03	Lancaster	Irvington	Y	Y	2
LA-03-05	Lancaster	Lively	Y	Y	1
LA-04-01	Lancaster	Lively	Y	N	-----
LA-04-02	Lancaster	Lively	Y	Y	2
LA-04-03	Lancaster	Lively	Y	Y	2
LA-04-04	Lancaster	Irvington	Y	Y	2
LA-04-05	Lancaster	Irvington	Y	Y	2
LA-04-06	Lancaster	Irvington	Y	Y	2
LA-04-07	Lancaster	Urbanna	Y	Y	2
MI-96-01	Middlesex	Urbanna	Y	Y	2
MI-01-03	Middlesex	Morattico	Y	Y	3
MI-02-03	Middlesex	Church View	Y	Y	2
MI-02-04	Middlesex	Church View	Y	Y	2
MI-02-05	Middlesex	Church View	Y	Y	1
MI-02-07	Middlesex	Saluda	Y	Y	3
MI-03-02	Middlesex	Church View	Y	Y	2
MI-03-03	Middlesex	Urbanna	Y	Y	3
MI-03-04	Middlesex	Urbanna	Y	N	-----
RI-89-02	Richmond	Tappahannock	Y	Y	3
RI-90-03	Richmond	Champlain	Y	Y	1
RI-96-02	Richmond	Tappahannock	Y	Y	2
RI-96-03	Richmond	Morattico	Y	Y	0
RI-97-01	Richmond	Montross	Y	Y	2
RI-98-03	Richmond	Montross	Y	Y	2
RI-99-02	Richmond	Morattico	Y	Y	3

Appendix II: -continued-

Nest Code	County	Topo	Occupied Territory	Active Nest	Chicks Produced
RI-99-03	Richmond	Lively	Y	Y	2
RI-00-01	Richmond	Champlain	Y	Y	1
RI-00-03	Richmond	Tappahannock	Y	Y	0
RI-01-02	Richmond	Tappahannock	Y	Y	2
RI-02-02	Richmond	Montross	Y	Y	3
RI-02-04	Richmond	Tappahannock	Y	Y	2
RI-02-07	Richmond	Tappahannock	Y	Y	0
RI-02-08	Richmond	Tappahannock	Y	Y	3
RI-03-01	Richmond	Champlain	Y	N	-----
RI-03-02	Richmond	Tappahannock	Y	Y	2
RI-03-03	Richmond	Tappahannock	Y	Y	0
RI-03-04	Richmond	Tappahannock	Y	Y	0
RI-03-05	Richmond	Tappahannock	Y	Y	0
RI-03-07	Richmond	Tappahannock	Y	Y	0
RI-03-10	Richmond	Haynesville	Y	Y	2
RI-03-11	Richmond	Haynesville	Y	Y	1
RI-03-12	Richmond	Morattico	Y	Y	0
RI-03-13	Richmond	Morattico	Y	Y	2
RI-04-01	Richmond	Champlain	Y	Y	2
RI-04-02	Richmond	Tappahannock	Y	Y	0
RI-04-03	Richmond	Morattico	Y	N	-----
RI-04-04	Richmond	Morattico	Y	Y	2
ST-01-01	Stafford	Salem Church	Y	Y	2
WE-84-01	Westmoreland	Champlain	Y	Y	0
WE-88-01	Westmoreland	Champlain	Y	Y	3
WE-01-01	Westmoreland	Rollins Fork	Y	Y	1
WE-01-02	Westmoreland	Loretto	Y	N	-----
WE-03-02	Westmoreland	Champlain	Y	Y	2
WE-03-16	Westmoreland	Haynesville	Y	Y	
WE-04-01	Westmoreland	Rollins Fork	Y	Y	1
WE-04-02	Westmoreland	Rollins Fork	Y	Y	2

[1]Nesting results unknown due to dense foliage during productivity flight.

Appendix III: Summary of 2004 Bald Eagle survey results for the York River Drainage. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CA-99-01	Caroline	Ashland	Y	Y	1
GL-02-02	Gloucester	Gressitt	Y	Y	1
GL-04-01	Gloucester	Gressitt	Y	Y	2
GL-04-02	Gloucester	Clay Bank	Y	Y	3
HN-95-01	Hanover	Hanover	Y	Y	2
JC-95-01	James City	Toano	Y	Y	1
JC-00-01	James City	Gressitt	Y	Y	2
KQ-96-01	King & Queen	K&Q Courthouse	Y	Y	1
KQ-03-02	King & Queen	K&Q Courthouse	Y	Y	1
KQ-04-01	King & Queen	West Point	Y	Y	3
KQ-04-02	King & Queen	West Point	Y	N	-----
KW-80-01	King William	West Point	Y	Y	1
KW-88-01	King William	New Kent	Y	Y	3
KW-97-03	King William	West Point	Y	Y	2
KW-98-02	King William	K&Q Courthouse	Y	Y	2
KW-99-01	King William	K&Q Courthouse	Y	Y	1
KW-00-01	King William	K&Q Courthouse	Y	Y	0
KW-01-01	King William	Tunstall	Y	Y	1
KW-01-02	King William	Tunstall	Y	Y	3
KW-02-01	King William	K&Q Courthouse	Y	Y	3
KW-03-01	King William	Tunstall	Y	Y	3
KW-03-02	King William	West Point	Y	Y	2
KW-03-03	King William	New Kent	Y	Y	3
KW-04-01	King William	New Kent	Y	Y	2
KW-04-02	King William	West Point	Y	Y	0
NK-86-01	New Kent	Tunstall	Y	Y	1
NK-99-01	New Kent	Toano	Y	Y	1
NK-01-01	New Kent	West Point	Y	Y	3
NK-01-03	New Kent	Tunstall	Y	Y	2
NK-03-01	New Kent	Toano	Y	Y	2
NK-03-02	New Kent	Toano	Y	Y	2
NK-03-04	New Kent	New Kent	Y	Y	2
NK-04-01	New Kent	West Point	Y	Y	1
NK-04-02	New Kent	New Kent	Y	Y	0
NK-04-03	New Kent	Tunstall	Y	Y	2
YK-99-02	York	Williamsburg	Y	Y	3
YK-02-02	York	Yorktown	Y	Y	0
YK-02-04	York	Williamsburg	Y	Y	1

Appendix III: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
YK-03-01	York	Clay Bank	Y	Y	1
YK-04-01	York	Poquoson W.	Y	Y	2
YK-04-02	York	Yorktown	Y	Y	2
YK-04-03	York	Williamsburg	Y	Y	2

Appendix IV: Summary of 2004 Bald Eagle survey results for the James River Drainage. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CC-91-02	Charles City	Charles City	Y	Y	1
CC-96-02	Charles City	Brandon	Y	Y	2
CC-98-05	Charles City	Brandon	Y	N	-----
CC-99-04	Charles City	Charles City	Y	Y	2
CC-99-06	Charles City	Providence Forge	Y	Y	3
CC-00-01	Charles City	Charles City	Y	Y	2
CC-00-03	Charles City	Brandon	Y	N	-----
CC-01-06	Charles City	Westover	Y	Y	0
CC-02-02	Charles City	Westover	Y	Y	3
CC-02-04	Charles City	Brandon	Y	N	-----
CC-02-06	Charles City	Brandon	Y	Y	2
CC-02-07	Charles City	Westover	Y	Y	2
CC-03-01	Charles City	Westover	Y	Y	2
CC-03-02	Charles City	Hopewell	Y	Y	2
CC-03-03	Charles City	Westover	Y	Y	0
CC-03-04	Charles City	Westover	Y	Y	3
CC-03-05	Charles City	Charles City	Y	Y	2
CC-04-01	Charles City	Westover	Y	Y	2
CC-04-02	Charles City	Westover	Y	Y	1
CC-04-03	Charles City	Charles City	Y	Y	1
CC-04-04	Charles City	Brandon	Y	Y	2
CC-04-05	Charles City	Claremont	Y	Y	2
CC-04-06	Charles City	Brandon	Y	Y	2
CC-04-07	Charles City	Brandon	Y	Y	2
CD-98-01	Chesterfield	Hopewell	Y	Y	3
CD-98-02	Chesterfield	Hopewell	Y	Y	3
CD-99-01	Chesterfield	Hopewell	Y	Y	1
CD-02-02	Chesterfield	Hopewell	Y	Y	2
CD-04-01	Chesterfield	Hopewell	Y	Y	0
CD-04-02	Chesterfield	Dutch Gap	Y	Y	2
CD-04-03	Chesterfield	Dutch Gap	Y	N	-----
HE-95-01	Henrico	Roxbury	Y	Y	0
HE-99-01	Henrico	Hopewell	Y	Y	3
HE-99-02	Henrico	Drewrys Bluff	Y	Y	0
HE-03-01	Henrico	Hopewell	Y	Y	3
HE-04-01	Henrico	Dutch Gap	Y	Y	2
HO-04-01	Hopewell City	Hopewell	Y	Y	0
IW-86-01	Isle of Wight	Bacons Castle	Y	Y	2

Appendix IV: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
IW-96-01	Isle of Wight	Benns Church	Y	Y	2
IW-99-01	Isle of Wight	Benns Church	Y	Y	2
IW-02-01	Isle of Wight	Bacons Castle	Y	Y	2
IW-04-01	Isle of Wight	Benns Church	Y	Y	3
IW-04-02	Isle of Wight	Mulberry Island	Y	Y	2
JC-96-02	James City	Norge	Y	Y	3
JC-01-01	James City	Surry	Y	Y	3
JC-01-02	James City	Hog Island	Y	Y	0
JC-02-01	James City	Norge	Y	Y	0
JC-03-03	James City	Norge	Y	Y	2
JC-04-01	James City	Hog Island	Y	Y	2
JC-04-02	James City	Norge	Y	Y	0
JC-04-03	James City	Norge	Y	Y	2
JC-04-04	James City	Norge	Y	Y	3
JC-04-05	James City	Norge	Y	Y	1
JC-04-06	James City	Norge	Y	Y	2
JC-04-07	James City	Norge	Y	Y	1
JC-04-08	James City	Surry	Y	Y	3
NK-01-04	New Kent	Walkers	Y	Y	2
NN-02-01	Newport News	Mulberry Island	Y	Y	1
NN-02-02	Newport News	Newport News N.	Y	Y	3
NN-04-01	Newport News	Mulberry Island	Y	Y	0
PB-04-01	Petersburg City	Prince George	Y	Y	3
PG-89-01	Prince George	Charles City	Y	N	-----
PG-91-01	Prince George	Charles City	Y	Y	2
PG-94-02	Prince George	Westover	Y	Y	2
PG-00-02	Prince George	Savedge	Y	Y	1
PG-00-03	Prince George	Charles City	Y	Y	2
PG-00-04	Prince George	Westover	Y	Y	3
PG-00-05	Prince George	Westover	Y	Y	0
PG-01-01	Prince George	Savedge	Y	Y	2
PG-01-02	Prince George	Savedge	Y	Y	2
PG-01-03	Prince George	Charles City	Y	Y	0
PG-02-02	Prince George	Charles City	Y	Y	2
PG-04-01	Prince George	Claremont	Y	Y	2
PO-98-01	Powhatan	Midlothian	Y	Y	1
RM-01-01	Richmond City	Bonair	Y	Y	2
SK-91-01	Suffolk City	Chuckatuck	Y	Y	3
SK-00-01	Suffolk City	Suffolk	Y	Y	2
SK-02-02	Suffolk City	Chuckatuck	Y	Y	3

Appendix IV: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
SK-02-02	Suffolk City	Chuckatuck	Y	Y	3
SK-03-01	Suffolk City	Windsor	Y	Y	1
SK-04-01	Suffolk City	Newport News S.	Y	Y	1
SU-96-04	Surry	Hog Island	Y	N	-----
SU-97-04	Surry	Surry	Y	Y	2
SU-99-02	Surry	Surry	Y	Y	1
SU-99-04	Surry	Savedge	Y	Y	2
SU-01-02	Surry	Surry	Y	Y	1
SU-02-01	Surry	Hog Island	Y	Y	1
SU-03-02	Surry	Hog Island	Y	Y	2
SU-03-03	Surry	Claremont	Y	Y	2
SU-03-04	Surry	Claremont	Y	Y	1
SU-04-01	Surry	Hog Island	Y	Y	2
SU-04-02	Surry	Hog Island	Y	N	-----
SU-04-03	Surry	Hog Island	Y	Y	3
SU-04-04	Surry	Surry	Y	Y	2
SU-04-05	Surry	Surry	Y	Y	0
SU-04-06	Surry	Surry	Y	Y	1
SU-04-07	Surry	Claremont	Y	Y	0
SU-04-08	Surry	Claremont	Y	Y	2
SU-04-09	Surry	Savedge	Y	Y	1

Appendix V: Summary of 2004 Bald Eagle survey results for the western shore fringe of the Chesapeake Bay. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
GL-02-01	Gloucester	Saluda	Y	N	-----
GL-04-03	Gloucester	Gloucester	Y	Y	0
HM-03-01	Hampton City	Newport News N.	Y	Y	0
HM-04-01	Hampton City	Hampton	Y	Y	2
KQ-02-02	King and Queen	Church View	Y	Y	1
KQ-04-03	King and Queen	Church View	Y	Y	1
LA-03-04	Lancaster	Deltaville	Y	Y	2
MI-85-01	Middlesex	Wilton	Y	Y	3
MI-01-02	Middlesex	Church View	Y	Y	2
MI-02-06	Middlesex	Shackleford	Y	Y	3
MI-04-01	Middlesex	Wilton	Y	Y	1
MT-97-01	Mathews	Ware Neck	Y	Y	2
MT-00-01	Mathews	Mathews	Y	Y	2
MT-01-02	Mathews	Mathews	Y	Y	1
MT-02-01	Mathews	Newpoint Comfort	Y	Y	2
ND-86-01	Northumberland	Lancaster	Y	Y	2
ND-92-01	Northumberland	Reedville	Y	Y	2
ND-01-01	Northumberland	Fleets Bay	Y	N	-----
ND-02-05	Northumberland	Reedville	Y	Y	3
ND-04-01	Northumberland	Reedville	Y	Y	2
ND-04-02	Northumberland	Reedville	Y	Y	3

Appendix VI: Summary of 2004 Bald Eagle survey results for the Eastern Shore. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
AC-88-02	Accomack	Exmore	Y	Y	0
AC-91-02	Accomack	Jamesville	Y	Y	1
AC-93-01	Accomack	Pungoteague	Y	Y	2
AC-93-03	Accomack	Parksley	Y	Y	1
AC-94-01	Accomack	Chincoteague W.	Y	Y	2
AC-94-02	Accomack	Chincoteague E.	Y	Y	2
AC--97-02	Accomack	Accomac	Y	Y	0
AC-98-02	Accomack	Pungoteague	Y	Y	3
AC-99-02	Accomack	Accomac	Y	Y	2
AC-00-01	Accomack	Chincoteague W.	Y	Y	1
AC-01-01	Accomack	Saxis	Y	Y	1
AC-02-02	Accomack	Hallwood	Y	Y	3
AC-03-03	Accomack	Chincoteague E.	Y	Y	1
AC-03-05	Accomack	Parksley	Y	Y	2
AC-03-06	Accomack	Chesconnessex	Y	Y	2
AC-03-07	Accomack	Tangier Island	Y	Y	0
AC-04-01	Accomack	Accomac	Y	Y	2
AC-04-02	Accomack	Metomkin Inlet	Y	Y	2
AC-04-03	Accomack	Hallwood	Y	Y	1
AC-04-04	Accomack	Saxis	Y	Y	1
AC-04-05	Accomack	Parksley	Y	Y	2
AC-04-06	Accomack	Parksley	Y	Y	2
NT-96-01	Northampton	Cheriton	Y	Y	2
NT-97-01	Northampton	Townsend	Y	Y	2
NT-00-01	Northampton	Jamesville	Y	Y	1
NT-01-01	Northampton	Cheriton	Y	N	-----
NT-02-01	Northampton	Cheriton	Y	Y	2
NT-02-02	Northampton	Cheriton	Y	Y	0
NT-03-01	Northampton	Cheriton	Y	Y	1
NT-03-02	Northampton	Nassawaddox	Y	Y	0
NT-04-01	Northampton	Exmore	Y	Y	2
NT-04-02	Northampton	Pungoteague	Y	Y	2

Appendix VII: Summary of 2004 Bald Eagle survey results for lower tidewater. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CP-03-01	Chesapeake City	Bowers Hill	Y	Y	3
CP-03-03	Chesapeake City	Pleasant Ridge	Y	Y	2
CP-04-01	Chesapeake City	Deep Creek	Y	Y	2
NO-03-01	Norfolk City	Little Creek	Y	Y	2
SK-99-01	Suffolk City	Lake Drummond	Y	Y	1
VB-97-01	Virginia Beach	Kempsville	Y	Y	2
VB-99-01	Virginia Beach	Creeds	Y	Y	2
VB-00-01	Virginia Beach	North Bay	Y	Y	2
VB-02-01	Virginia Beach	Cape Henry	Y	Y	1
VB-02-02	Virginia Beach	Pleasant Ridge	Y	Y	3
VB-03-01	Virginia Beach	Kempsville	Y	N	-----
VB-04-01	Virginia Beach	Virginia Beach	Y	Y	0

Appendix VIII: Summary of 2004 Bald Eagle survey results for inland nests. See methods section for definition of "occupied territory" and "active nest".

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
AL-98-01	Albemarle	Simeon	NC	NC	NC
AM-01-01	Amherst	Lynchburg	Y	Y	?[1]
AM-03-01	Amherst	Lynchburg	Y	N	---
BT-93-01	Bath	Mountain Grove	NC	NC	NC
BT-99-01	Bath	Sunrise	NC	NC	NC
CD-03-01	Chesterfield	Hallsboro	Y	Y	2
CL-04-01	Clarke	Ashby Gap	Y	Y	2
CL-04-02	Clarke	Ashby Gap	Y	Y	2
CU-97-01	Culpepper	Rapidan	NC	NC	NC
HF-98-01	Halifax	Buffalo Springs	Y	Y	1
LO-02-01	Louisa	Mineral	NC	NC	NC
ME-97-01	Mecklenburg	Clacksville North	Y	Y	1
ME-00-02	Mecklenburg	John H. Kerr	Y	Y	2
ME-02-01	Mecklenburg	Bracey	Y	Y	2
ME-04-01	Mecklenburg	Tungsten	Y	Y	2
ME-04-02	Mecklenburg	Boydton	Y	Y	2
ME-04-03	Mecklenburg	Tungsten	Y	Y	2
NO-99-01	Nottoway	Danieltown	NC	NC	NC
PA-03-01	Page	Rileyville	NC	NC	NC
PE-96-01	Prince Edward	Green Bay	Y	Y	3
PV-03-01	Pittsylvania	Straightstone	NC	NC	NC
PW-98-03	Prince William	Thoroughfare Gap	Y	Y	1
SH-02-01	Shenandoah	Strasburg	NC	NC	NC
SO-01-01	Southampton	Riverdale	Y	Y	2
SS-97-01	Sussex	Disputanta South	Y	Y	2
SS-02-01	Sussex	Waverly	Y	Y	0
SS-02-02	Sussex	Yale	Y	Y	0

[1]Nest results not determined.